

1. Product Introduction

1.1 Product Description

MR CARTOOL automotive smoke leak detector is a specialty tool used with vehicle diagnostic devices to check the tightness of the vehicle pipeline system and find leaks, helping the auto repair technician to quickly and accurately determine whether the fault is caused by the pipeline leaks.

1.2 Functions and Features

Main Function

Tightness Test : It can test the tightness and leakage of the tested pipeline under system pressure.

Intake System Test: it can test the air tightness and damage degree of the pipes in the intake system.

Exhaust System Test: it can test the air tightness and damage degree of the pipes in the exhaust system.

EVAP System Test: it can test the leakage of fuel evaporation in the EVAP system.

Main Features

1. More directly, accurate and faster than traditional leak detection methods such as soap bubbles and throttle cleaners.
2. Adopting smoke generator technology facilitate smoke stability and large amount output.
3. Built-in air pump, ready for testing and maintenance.
4. Compact, lightweight design allows for any placement of machine for work.
5. Test oil is non-toxic and non-corrosive.

1.3 Product parameter

Output pressure: 8~12Psi

Output flow: 4L/Min

Power supply: 12V

Air source: built-in

Test oil capacity: 10 ML

Dimensions of the Main Unit: 110x155x230 mm

Package weight: 3.7KG

Package Size: 270x220x255 mm

2. Structure Diagram

2.1 Diagram of Equipment

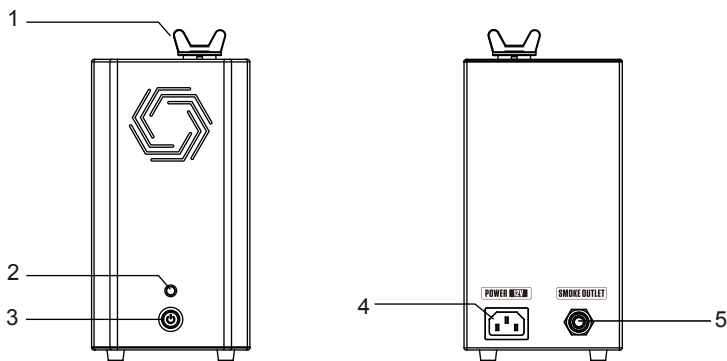


Figure 2.1 Diagram of T100

1-Oil Filler; 2-Working indicator; 3-Smoke mode;
4-Power output; 5-Smoke output;

3. Operation Description

3.1 Intake System Testing

1. Open the air filter cover and take it out.
2. Take out the tapered adapter from the accessory box and insert it into the air inlet pipe
3. Take out the smoke duct from the accessory box and connect it to the smoke outlet.
4. Take out the power cable from the accessory box and connect it to the power supply.
5. Unscrew the filling cap, pour 10ml of test oil, and tighten the filling cap.
6. Connect the car battery, and the then built-in air pump starts to work. Plug the smoke duct nozzle with your hand to check whether there is smoke flow;
7. Turn on the smoke switch.
8. Wait 3 minutes to find out if smoke is leaking from the intake system leaks.

3.2 Exhaust System Testing

1. Take the tapered adapter from the accessory box and insert it into the end of the exhaust pipe. In the case of dual exhaust pipes, a rubber plug can be used to block the other end.
2. The exhaust system testing is the same as the intake system testing and can be performed in the same way.

3.3 EVAP System Testing

1. Locate the carbon canister on the car and disconnect the fuel inlet/outlet pipe.
2. Take out the EVAP adapter from the accessory box and connect it to the tested oil pipe.
3. The EVAP system testing is the same as the intake system testing and can be performed in the same way.

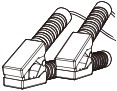
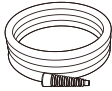
3.4 Engine Tightness Testing

1. Take out the special oil cap adapter from the accessory box and connect it to the oil port.
2. The Engine tightness testing is the same as the intake system testing and can be performed in the same way.

4. Care & Maintenance

1. After the testing is completed, clean the disassembled parts and put them back in the packing box.
2. Drain the left over test oil to the recycle bottle.
3. Wipe the equipment clean and check for malfunctions, loose joints, and damages.
4. After cleaning the main unit and accessories, put it in a cool, dry and dust-free place.
5. Smoke and oil will oxidize and deteriorate under long-term high temperature. It will shorten the service life of the smoke generator part, so please change the test oil regularly.

5. Parts list

Picture	Name	Specification	Quantity
	Power Cord Clamp	1.5 m	1
	Smoke Hose	1.5 m	1
	Standard Cone Adapter	30-85mm	1
	Rubber Connector Parts	16/10mm	1
	Test Oil Refill Bottle	100ml	1
	HOOK		1